





Understanding Local Food Environments, Food Policies, and Food Terminology

A Study of Two NYC Neighborhoods

With the increase in obesity and other dietrelated health issues and the persistence of food insecurity among many vulnerable populations, the need for transformative changes to our food systems and local food environments is critical. To improve population health, and the health of New York city residents, it is necessary to better understand the differences and similarities across neighborhood food environments.

The Hunter College New York City Food Policy Center conducted a short survey in East Harlem and the Upper East Side to explore residents' understanding of food insecurity, food shopping and cooking behaviors, and awareness of relevant food policy issues. This survey was performed to understand knowledge, attitudes, and behaviors around food, and to inform policymaking that addresses food-related health inequities in New York City.

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What is Food Insecurity?

The USDA defines food insecurity as the "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways." The USDA further adds that households that are food insecure report three conditions: worrying whether their food would run out before being able to buy more; the food they bought

didn't last and they didn't have money to get more; and they couldn't afford to eat balanced meals. This is distinct from hunger, which can be a consequence of food insecurity and refers to the physiological sensation, as opposed to the economic and social context associated with food insecurity.

In 2014, 1.37 million New Yorkers (16.4%) reported being food insecure.² This percentage climbs to nearly 20% in Brooklyn and the Bronx.

Currently, nearly 1.8 million low-income New Yorkers rely on food assistance from the Supplemental Nutritional Assistance Program (SNAP) (former, "food stamps").³

How is the City of New York Working to Improve Food Environments?

The city of New York is working to ensure its residents have enough nutritious food to eat through various initiatives in partnership with local community-based and nonprofit organizations.

Current initiatives in New York City that address food insecurity/hunger include educational nutrition programs for children in preschools and at farmers' markets, mobile food carts to increase access to fresh produce in underserved communities, and additional financial assistance for fresh fruits and vegetables at farmers' markets. Partnership programs, such as **FRESH**

and **Shop Healthy NYC**, work with community members to support access to adequate and healthy grocery store options among vulnerable populations. Additionally, **NYC Food Standards** aim to create healthier workplaces by setting nutritional restrictions and minimums to improve dietary intake of foods purchased and served by all New York City agencies.

While there are numerous programs and initiatives in place that address hunger and food insecurity, there is a lack of understanding of what community residents think about food, food policy, and food insecurity.

Methods

The Center conducted a short quantitative survey in two New York City neighborhoods: **East Harlem (EH)** and the **Upper East Side (UES)**. Hunter College research assistants did on-street intercept interviews (i.e., subway stops and street corners with heavy foot traffic) in East Harlem (zip codes of 10029, 10035) and the Upper East Side (zip codes of 10021, 10028, 10044, 10065, 10075, 10128), and asked individuals who passed by to participate in a survey (Figure 1). Those who expressed interest were read a consent form, gave verbal consent, and completed the survey by hand. In total, 313

people participated in the study. Of these, 183 were from EH and 130 from UES.

The Center selected these street corners for survey recruitment based on pedestrian traffic data collected by the City of New York and the Metropolitan Transportation Authority. Along East 86th Street, for example, foot traffic can reach 3,000 people per hour. Similarly, the foot traffic on East 68th Street, near Hunter College, ranges between 2,500-3,500 people per hour during midday and evening hours. While East Harlem has less foot traffic than the Upper East Side, 125th Street (a major commercial street) sees approximately 1,000-1,500 people per hour during evening peak hours.

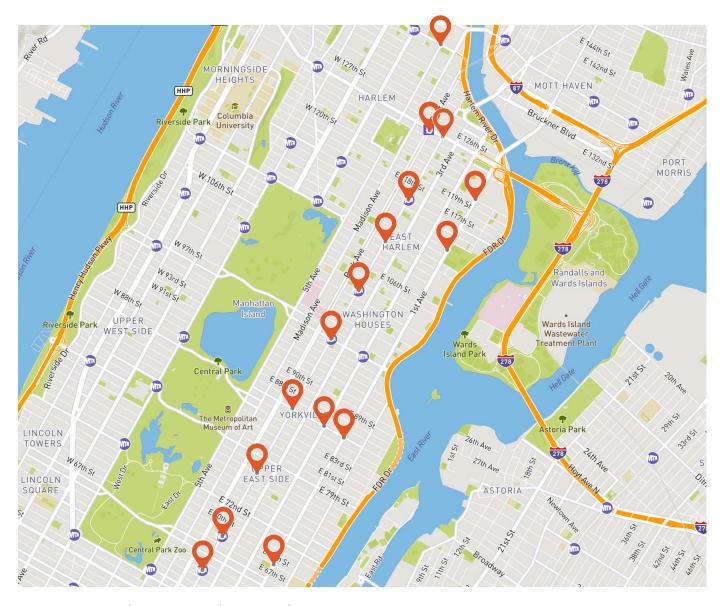


Figure 1: Map of recruitment locations for survey

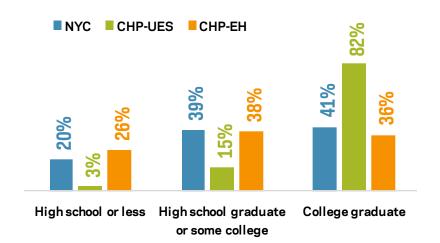
Demographics

Education - City Data (Figure 2)

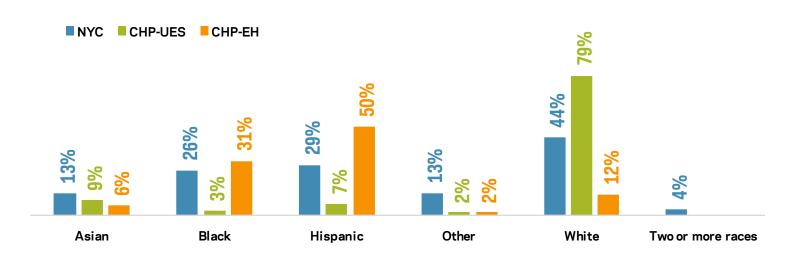
NYC DATA⁴

The following are data taken from the **New York City Community Health Profiles (CHP)**, as well as from the 2010 Census (Figures 2-4).

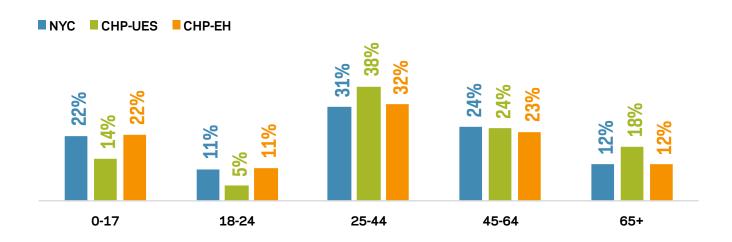
⁴ Data taken from Community Health Profiles and 2010 Census. Data for Race and Ethnicity - City Data tables do not add to 100% because Hispanic was reported separately in 2010 Census.



Race/Ethnicity - City Data (Figure 3)



Age - City Data (Figure 4)



WHAT WE FOUND

The majority of the **Upper East Side** respondents were **white** (82%) and **college educated** (83%). Only 5% of respondents held a high school degree or less. Nearly three-quarters of respondents (74%) reported an income of \$50,000 or more. Nearly all of the Upper East Side respondents (95%) indicated they did not participate in a Women, Infants and Children (WIC) or government food assistance program. These figures mirror the official demographics in NYC's Community Health Profile (CHP) of the Upper East Side (79% white, 82%)

college educated, and only 3% without a high school degree).⁵

The majority of **East Harlem** respondents were **black** (32%) or **Hispanic** (45%).

One-quarter (25%) were college educated.

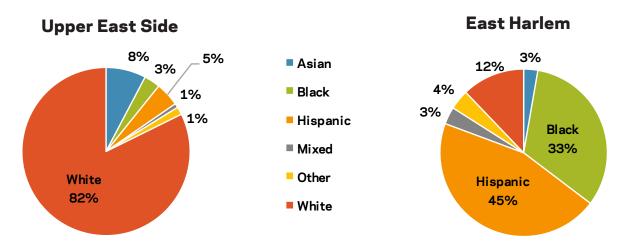
Over three-quarters (81%) had an income of less than \$50,000, and 45% participated in some government assistance program.

The East Harlem Community Health Profile reports 81% of residents in East Harlem as black or Hispanic. The CHP also indicates 26% held less than a high school degree, while our survey indicated 43% of respondents held only a high school degree or less.⁶

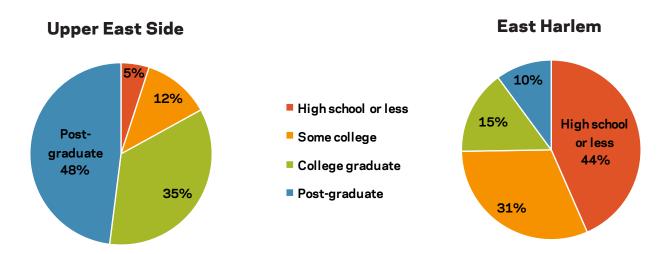
Age (Figure 5)



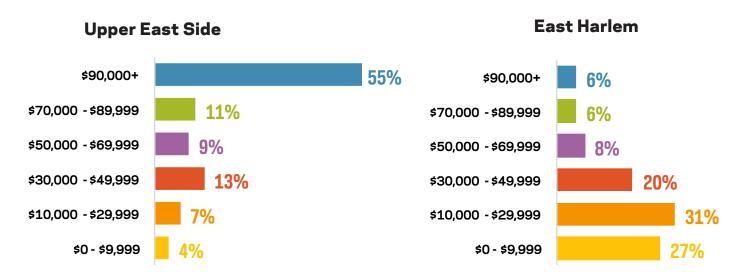
Race / Ethnicity (Figure 6)



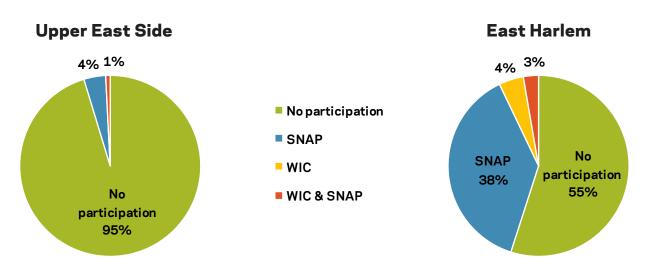
Education (Figure 7)



Household Income (Figure 8)



WIC and SNAP Participation (Figure 9)



Residents in East Harlem and the Upper East Side Cook at Home

WHAT WE FOUND

East Harlem respondents reported cooking more meals at home, nearly every day (54%), than respondents in the Upper East Side (45%). Approximately 85% of respondents in both neighborhoods cook at home, at least 2-3 times a week (Figure 10).

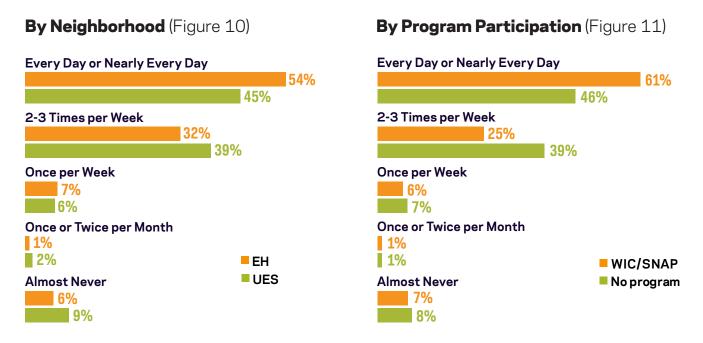
A greater proportion of WIC/ SNAP recipients (61%) cook at home nearly every day, compared to those not participating in any program (46%) (Figure 11).

WHY THIS IS IMPORTANT

The fact that a greater proportion of WIC/SNAP recipients cooked at home nearly every day compared to non-recipients is significant because it counters the myth that low-income people eat too much fast food and therefore choose to be unhealthy. ^{7,8}

These data support evidence that low-income families and WIC/SNAP recipients cook at home. A study by Share Our Strength's Cooking Matters program found that a vast majority of low-income families cooked at home at least five nights a week. Studies have also shown that home cooking is linked to benefits such as generally positive effects on health and BMI. In addition, it is worth noting that respondents from East Harlem were more likely to cook every day than those from the Upper East Side. This may reflect the fact that fast-food consumption rises as income rises.

How often do you cook meals at home (not including reheating takeout)?



Food Shopping Behaviors in EH and UES

When you shop for fruits and vegetables, what's most important to you? (Figure 12)

WHAT WE FOUND

Most respondents in both neighborhoods purchased fruit and vegetables from grocery stores and farmers' markets, and ranked quality as the most important factor when buying produce. However, 30% of East Harlem residents considered price the second key factor in purchasing fruit and vegetables, and convenience as the third (7%). Conversely, 15% of Upper East Side respondents considered convenience the second most important factor and price as the third (12%) (Figure 12).

The two neighborhoods differed in food and shopping behaviors. More respondents in East Harlem reported shopping at bodegas and food pantries than respondents in the Upper East Side (17% vs. 6%, respectively).

WHY THIS IS IMPORTANT

Differences in food and shopping behaviors between the two neighborhoods suggest varying levels of access to fresh, affordable produce. Our findings show that quality of food was important to both East Harlem and Upper East Side respondents; however, price was more of a concern for East Harlem respondents while convenience was more important to Upper East Side respondents. Studies show that the availability of markets with healthy food options does not guarantee that community members will shop there. The needs of East Harlem residents suggest that future food access reforms should not only focus on building supermarkets but also ensuring that prices are affordable.



EH and UES Residents' Experiences With Food Insecurity

WHAT WE FOUND

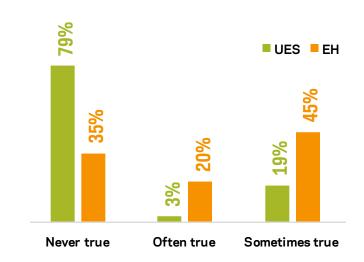
East Harlem respondents reported higher rates of food insecurity: 65% of East Harlem respondents reported to have worried about running out of food before being able to buy more food in the past year, compared to 22% of respondents in the Upper East Side (Figure 13). Over half (58%) of East Harlem respondents said that within the last year, the food they bought sometimes or often didn't last or they didn't have money to get more, compared to only 15% of the Upper East Side respondents (Figure 14).

WHY THIS IS IMPORTANT

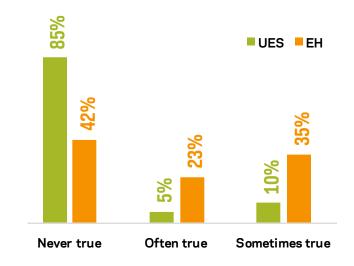
Literature shows that food insecurity is associated with poor health and health outcomes; more expensive and healthier diets result in better health outcomes for higher-socioeconomic populations.¹¹

Lower-socioeconomic groups tend to have lower-quality diets and higher rates of obesity, cardiovascular disease, and diabetes. ¹² Other studies have linked these poorer health outcomes and risk factors to the lack of access to fruits and vegetables. ¹³ The long term effects of food insecurity are also significant, especially during childhood development and pregnancy. ¹⁴ Knowledge of negative health outcomes related to food insecurity in lower-income communities should encourage policymakers to advocate for more reforms in this critical area.

Within the past 12 months, I/we worried whether our food would run out before we got money to buy more: (Figure 13)



Within the past 12 months, the food we bought just didn't last and we didn't have money to get more: (Figure 14)



Experiences with Food Insecurity Among SNAP and WIC Beneficiaries

WHAT WE FOUND

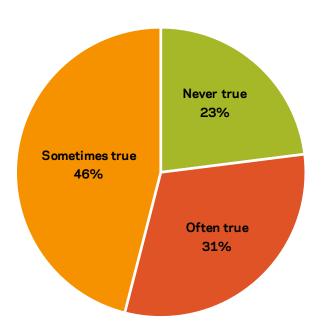
When asked the question about whether, in the past 12 months, they worried if their food would run out before they got money to buy more, those receiving WIC, SNAP, or both benefits had higher rates of food insecurity, compared to respondents not participating in any program.

WHY THIS IS IMPORTANT

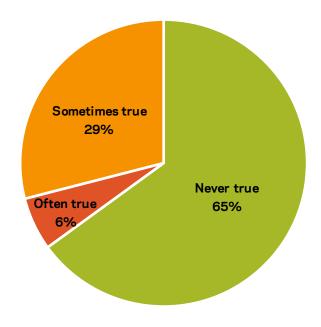
While there are still many barriers to improving the nutrition status of SNAP participants, ¹⁵ it is important to note that the largest population of SNAP recipients is made up of children and families with children. Among these households, across the US, SNAP recipient households with children have food insufficiency rates of 9.4%, while households not on SNAP have a rate of 6.9%. ¹⁶ These food insufficiencies can lead to higher likelihoods of food insecurity and health problems for children in SNAP households compared to non SNAP households. ¹⁴ Improving the nutrition status of SNAP participants is clearly important for preventing the long-term health effects of food insecurity.

Experience of food insecurity within the past 12 months (Figure 15)

Recieving SNAP, WIC, or both:



Not participating in any program:



Less than Half of EH and UES Respondents Know the Definition of Food Insecurity

WHAT WE FOUND

The Center asked respondents, "If you heard someone say, 'Many people who live in NYC are food insecure', what would that mean to you?" Overall, there was a general misunderstanding of what food insecurity means. Over one-quarter (27%) of East Harlem respondents were unsure of the definition, and 7% did not believe it meant anything. Meanwhile, nearly one-quarter (22%) of respondents in the UES were unsure of the definition, and 16% reported food security "didn't mean anything." The rest of respondents associated "food insecurity" with food security, food waste, food spoilage, or eating disorders. Indeed, only close to one-third (31%) of East Harlem respondents defined a person who is "food insecure" as "a person who cannot obtain food due to lack of money," compared to only 45% of UES respondents. Respondents in both East Harlem and the Upper East Side, however, demonstrated an understanding of basic nutritional education. The majority of respondents agreed to the statements that "eating fruit and vegetables can prevent disease," and "eating mostly fried, fatty, or sugary foods can make you sick." But more East Harlem respondents disagreed that eating fruit and vegetables can help prevent disease (9% vs. 2% in the Upper East Side). (Figure 16) There was also general consensus among all respondents that some people do not have access to healthy food because healthy food is expensive, or there are few places to buy healthy foods in their neighborhood.

WHY THIS IS IMPORTANT

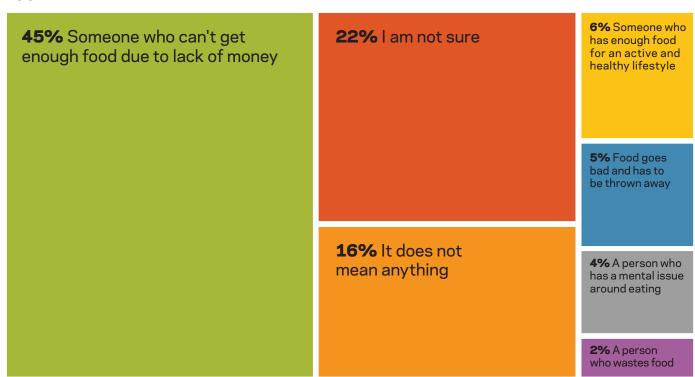
Given the high rates of food insecurity in East Harlem, and across the City, it is not only important to address disparities in food access and affordability, but also to ensure that policymakers, community members and residents have a shared understanding of what food insecurity means. Researchers have shown that there are several definitions of what having enough food means among a group of those who are food insecure. 17,18 These differences in understanding, even among the food insecure, suggest the need for more emphasis on food education, including common terminology, in NYC communities. To achieve comprehensive change, it is essential that all stakeholders are on the same page.

If you heard someone say, "Many people who live in NYC are 'food insecure'," what would that mean to you? (Figure 16)

East Harlem

10% Someone who 9% A person who 31% Someone who can't get has enough food for wastes food enough food due to lack of money an active and healthy lifestyle **7%** It does 8% A person who has a mental issue around eating not mean anything 27% I am not sure 8% Food goes bad and has to be thrown away

Upper East Side



EH and UES Residents See Government Role in Improving Food Safety, SNAP Benefits, and Farmer's Markets

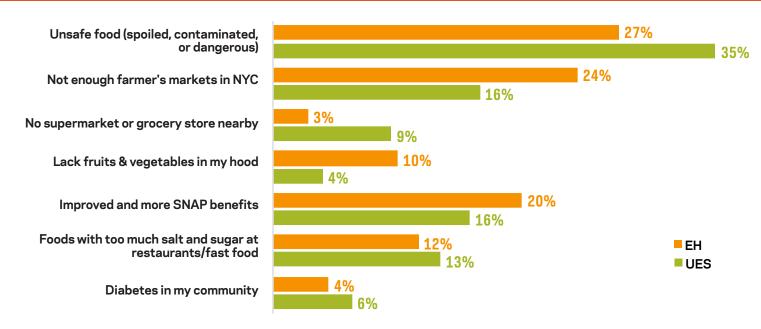
WHAT WE FOUND

The Center asked respondents to select from a list one issue that they think could be helped by a food policy, food law, or governmental funding. Of all the issues, both neighborhoods selected food safety first (35% in the Upper East Side and 27% in East Harlem), followed by a lack of farmers' markets (16% in the Upper East Side, 24% in East Harlem). Improved and expanded SNAP benefits came in a close third, with 16% concerned in the Upper East Side and 20% in East Harlem. Respondents also see a role for government in regulating foods high in salt and sugar served at restaurants. Lack of fresh produce and groceries nearby and diabetes in the community were among the lowest rated (Figure 17).

WHY THIS IS IMPORTANT

This finding illustrates the importance of understanding what issues community members think can be helped by a food policy, food law, or governmental funding. The participation of community residents in policymaking processes is crucial. Of note, we see a lot of policymaking emphasis currently on the availability of supermarkets and grocery stores but this may be less of a priority to residents than food safety, access to farmer's markets, and improved SNAP benefits. With limited resources, government and policymakers should perhaps focus first on areas where community members think they can have most impact.

Which of the following do you think could be helped by a food policy, food law, or government funding? (Figure 17)



What do EH and UES Residents Think About Food Policy and Practice?

WHAT WE FOUND

The Center also asked respondents whether they were in favor of, opposed, or weren't sure about various food policies. Respondents in both neighborhoods expressed support for government programs that would increase access to healthy foods. Free school lunches and summer lunches for children and discounts for low-income New Yorkers at farmers' markets garnered overwhelmingly positive responses (range of 72% - 90% 'in favor' for both neighborhoods).

Respondents also showed support for greater availability of food labeling information. The majority were in favor of a law mandating warning labels for high-sodium foods; however, East Harlem respondents supported high-salt warning labels (83%) at a higher rate than those in the Upper East Side (75%). More than 80%

support the law mandating chain restaurants display calorie content on menus.

Proposals for government restrictions revealed more differences of opinion among residents. In the Upper East Side, 55% of respondents approved of a "sugar tax" - a government tax on candy, soda, cake and chips to reduce eating these foods - while 32% opposed it. In East Harlem, there was a roughly even split of around 40% of those who supported the proposal and those who opposed it. Over half (54%) of Upper East Side respondents agreed with a hypothetical fast food toy ban, while 27% opposed it. In East Harlem, respondents again displayed a roughly even split (38% in favor; 33% against). Among all respondents, 25% were unsure of how they felt about the fast-food toy ban (Figure 18).

WHY THIS IS IMPORTANT

Understanding support (or lack thereof) towards food policies among community residents is crucial for effective policymaking. Of those surveyed here, most policies are widely supported by overwhelming majorities in both a low- and a high-income neighborhood. This demonstrates a very high interest in and support of legislating meaningful food policy that improves community health and well-being for all New Yorkers.

For those policies with relatively lower support (banning fast food toys and the "sugar tax"), it will be important to monitor the success in cities

where they have been enacted to inform future local initiatives in these areas.

Finally, as recent literature shows, the influence of some legislation such as calorie labeling has yet to demonstrate the desired effects on food consumption and purchasing behavior on a population level.¹⁹ This is in spite of overall wide approval for such policy changes. As such, future research can build on these findings by examining in further depth the attitudes towards and perceptions of different food policies.

% of Respondents in Support of Each Food Policy



What Can We Learn from the EH/UES Survey?

The goal of the East Harlem/Upper East Side survey was to begin the conversation on knowledge, behaviors, perceptions, and understanding about food, food insecurity, and food policies, among residents of two disparate New York City neighborhoods. The survey enabled the Hunter College New York City Food Policy Center to gain insight about which aspects of the food system are most important to residents at the community level, and to highlight the needs and perspectives of community members around food issues.

The EH/UES survey can be used as a starting off point to further examine language around food and how people perceive and discuss food issues and policies in their specific communities. It would also be interesting to expand the study

to additional neighborhoods throughout New York City.

The Center will use findings from this survey and future research to develop a glossary of food-related keywords, and keyphrases by examining survey responses about food and food-related issues (e.g. hunger, food safety, food choices, fast food, food-related chronic disease) from both neighborhoods. This inventory glossary will be refined iteratively throughout subsequent phases of research. Once the Center has a deeper understanding around the language of food, it can help community-based organizations, academics, social entrepreneurs and policymakers have greater impacts in their communities.



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About the Hunter College New York City Food Policy Center

The Hunter College New York City Food Policy Center develops intersectoral, innovative and evidence-based solutions to preventing dietrelated diseases and promoting food security in New York City and beyond. The Center works with policymakers, community organizations, advocates, and the public to create healthier, more sustainable food environments and to use food to promote community and economic development. Through interdisciplinary research, policy analysis, evaluation, and education, we leverage the expertise and passion of the students, faculty and staff of Hunter College. The Center aims to make New York City a model for smart, fair food policy.

